RVEY C. HAYES, NAR AUTHORITY

ead of Navy's Sound oratory Is Dead at 89

Harvey C. Hayes, pioneer
development of under-
acoustics, died last Tues-
t Peterborough, N. H. He
89 years old and had re-
in 1947 as head of the
s Underwater Sound Lab-
y at New London, Conn.
nouncement of Dr. Hayes's
was made yesterday by
r. Allan K. Cameron Jr.,
staff officer of the lab-
y.

Hayes was credited with
lishing the earliest stand-
of absolute calibration of
water sound transducers.
s the first to study such
as the interference of
dynamic noise with the
ion of underwater echoes.
f the two types of sonar
nent used by the Navy at
art of World War II was
ed and produced under
pervision.

Work Begun in 1917

Hayes was a professor of
s at Swarthmore College
In 1917, he volunteered
rvices to the Navy to
ombat the German sub-
threat. He explained
is early research had led
conclude that the best
of detecting U-Boats
rough the use of unde
sound. In 1917 he r
his Swarthmore post t
t the Navy experiment
n at Fort Trumbull I
ondon.

he end of the war he re-
d with the Navy, and
the Naval Research Lab-
y was completed in
e became superintendent
sound division.

World War II, Dr. Hayes
ped improved sonar
and dome material, im-
transducer designs and
ques of localizing the
beyond the resolution of
onar beam. Recognizing
tentiality of the helicop
d the blimp in antisub-
warfare, he initiated the
pment of sonar equip
or them.

Hayes was born in North
, N. Y., and educated at
rd University, receiving
h.D. there in 1911. He
his teaching career at
rd and went to Swarth-
in 1919.

Compliment From Foe

KENNETH LITTAUER, LITERARY AGENT, 74

Kenneth P. Littauer, who won the Croix de Guerre and other decorations as a pilot in World War I, and as an Army Air Forces colonel helped plan the D-Day bombings in World War II, died Sunday afternoon in a Norwalk, Conn., nursing home. He was 74 years old and lived in Wilton, Conn.

Mr. Littauer became a literary agent in 1949 and served in that capacity until a few weeks ago in his own New York concern of Littauer & Wilkinson.

Mr. Littauer won a scholarship to Colgate University, and later went to Europe where he was a reporter for The New York American in London and Paris.

Early in 1916, before the United States entered the war, the 20-year-old reporter enlisted in the Franco-Belgian air squadron. Later he transferred to the United States Air Service and rose to the rank of commander of the 88th Observation Squadron. At the war's end he was a lieutenant colonel.

Besides the French Croix de Guerre he was decorated with his own country's Distinguished Service Cross, the Belgian Croix de Guerre and the Belgian Ordre de Leopold. During World War II Mr. Littauer was a senior intelligence officer with the Eighth Air Force in England.

After World War I, Mr. Littauer came to New York and worked for Street & Smith, the magazine publishers; from 1925 to 1948 he was fiction editor of Collier's.

He leaves his second wife, the former Helen Irwin Dowdey; 3 daughters, 11 grandchildren and 3 great-grandchildren.

Georgina Oeri, Art Critic And Teacher, Dead at 54

Georgina Oeri, art critic and teacher, died Sunday in Calvary Hospital, the Bronx. She was 54 years old and lived at 81 Bedford Street.

Miss Oeri was born in Basel, Switzerland. She attended the Universities of Basel, Perugia and Munich and the Sorbonne. Her book, "Man and His Images: A Way of Seeing," a summary of her philosophy

Deaths

BILSKY—Irving, beloved husband of Rose. Devoted father of Arlene Herling and Norman. Dear brother of Nettie Harris, Anna Wachner, Essie Romer, Simon and Morris. Cherished grandfather. Services Tuesday, July 16, 10:15 A.M., "The Riverside," 76th St. and Amsterdam Ave. Please omit flowers.

BLAGDEN—Mabel Whitney, of Red Bank, N. J., on Monday, July 15, 1968, after a brief illness. Widow of the late Dexter Blagden, mother of Charles H. Sabin Jr. and grandmother of Charles H. Sabin III and Thomas W. Sabin. Funeral services at Christ Church, Middletown, N. J., on Wednesday, July 17, 1968, at 10 A.M. Interment following at the Albany Rural Cemetery in Albany, N. Y. In lieu of flowers contributions may be sent to Planned Parenthood.

BLAU—Joseph. Beloved husband of Lena, devoted father of Renee Weinstein and Beatrice Marks. Dear brother of Estelle Ullman. Loving grandfather and great-grandfather. Services Tuesday, July 16 at 11:45 A.M., "The Riverside," 76 St. and Amsterdam Ave.

BLAU—Lena. Beloved wife of the late Samuel. Devoted mother of Melvin and Laurence. Loving grandmother. Dear sister of Gussie Warfield and Emanuel Adolph and the late Seymour Adolph. Services "Park West," 115 West 79 St., Tuesday, July 16, 2 P.M.

BRADY—Aline R., suddenly, July 14, 1968, at Briarcliff Manor, N. Y. Mother of David Brady, Tarrytown, N. Y. and Marna Brady [illegible], N.Y.C. Also survived by 6 grandchildren. Services Thurs. at Knoxville, Tenn.

BRAHN—[illegible] July 14, 1968. Beloved husband of [illegible]. Dear brother of [illegible] Service at the [illegible] Chapel, [illegible] Ave. [illegible] Cancer Research in lieu of flowers.

[illegible]

BURGER—[illegible]

BURGER—Nathan [illegible]

WALTER [illegible]

IRVING [illegible]

BURKE—[illegible]

IRWIN [illegible], Rabbi

LOUIS SUSMAN, President

CAMPBELL—[illegible] on July 14, 1968 [illegible] Born in Cherry Valley, N.Y. [illegible] Presbyterian Church, Cherry Valley, N.Y. [illegible] Cherry Valley.

CLARKSON—Cornelia Livingston, in her [illegible]

CONNOLLY—[illegible]

CONOVER—[illegible]